and the counties surrounding it which contain the primary viewers of the central city's television stations. A few top 30 ADIs for a few years are omitted because those market reports are missing or lost from the Arbitron depository.

- Day of the week: weekdays Monday through Friday.
- Time slot: each half hour from 7:30 to 9:00 P.M. in the Eastern and Pacific time zones and for each half hour from 6:30 to 8:00 P.M. in the Central and Mountain time zones.
- Program title.
- Station call letters.
- Station channel number.
- Station affiliation as listed by Arbitron. The affiliation codes are ABC, CBS, NBC, and IND (independent commercial station). In 1993, a separate affiliation code for Fox network stations is included. Public television stations, foreign television stations, and non-ADI stations, as identified by Arbitron, are excluded. Low power stations, in the few cases where they were reported by Arbitron, also were excluded. Primarily foreign language stations, as identified by their call letters or programming, also are excluded.
- ADI program rating: the estimated percent of all television households or persons tuned to a specific station.
- ADI program share: the estimated percent of all households using television or persons viewing television tuned to a specific station.

A few problems were encountered in trying to ensure a data base consistent over time and over markets:

- Some stations aired two or more programs in the same day and time slot over the course of the month. In these cases, the data for the program usually aired were entered. If it was not apparent which program was the usual program, the day and time slot was coded as "Special" and the average rating and share was entered.
- If the rating for a particular program was 0.5 or less, Arbitron left the ratings blank. We set the ratings and shares of such programs to zero.

- On occasion, the name of the same program was listed differently in different years and even within the same year. The program names were entered exactly as listed by Arbitron.

2. Additional market data

For each ADI in each year, the Arbitron data are augmented by additional information further describing the ADI. The additional information is:

- Rank of the ADI.
- Time zone of the ADI.
- Total number of households in the ADI as reported by Arbitron.
- Number of households with televisions in the ADI as reported by Arbitron.
- Number of households with televisions capable of receiving UHF signals in the ADI as reported by Arbitron. Arbitron reported the number of UHF households up to 1979; after 1979 we have assumed that all television households are capable of receiving UHF channels.
- Number of households with cable television in the ADI as reported by Arbitron. Before 1973, Arbitron does not report this statistic and we have set the number of cable households to zero.
- Number of households with VCRs in the ADI as reported by Arbitron. Arbitron begins reporting the number of VCR households in 1987; prior to that year, we have assumed that there are no VCR households.
- Per capita income in the metropolitan area represented by the ADI. The income data are part of the U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, Regional Economic Measurement Division's Regional Economic Information System (REIS). REIS reports metropolitan area per capita income (as aggregated from county level data from the states) for 1969 through 1992. The missing earlier years were estimated using per capita income trends in the home state of the metropolitan area. Per capita income in the last year, 1993, was estimated using recent trends in income within the metropolitan area.

IV. CROSS-SECTIONAL TESTS USING THE ARBITRON DATA BASE

The cross-sectional tests using the Arbitron data base are designed to analyze the rating differences between UHF and VHF signals. As discussed in the main body of this section, we examine the ratings of Fox programs on the same day and in the same time slot on Fox UHF and VHF stations, while at the same time controlling for market size, the number of competing stations, cable penetration, and viewer tastes.

The cross-sectional tests are done using regression analysis. Regression analysis is a method for systematically and quantitatively relating changes in one variable to changes in one or more other factors. In this case, the rating of a Fox program on each day in each half hour time slot (RATING) is related to:

- UHF or VHF signal (this factor is called UVV). This factor is represented by a dummy variable equal to 1 if the Fox station is on a UHF channel and equal to 1 if it is on a VHF channel. If there is a UHF handicap, the effect of this variable on ratings should be negative and significant. If there is no handicap, the coefficient should be insignificant.
- OTHU, the count of non-Fox commercial UHF channels. The coefficient on OTHU should be negative if more UHF channels leads to a lower Fox rating.
- OTHV, the count of non-Fox commercial VHF channels. The coefficient on OTHV should be negative if more VHF channels leads to a lower Fox rating.
- The number of television households (in thousands) as measured by Arbitron (TVHH).
- Cable penetration as measured by Arbitron (CAPEN). Cable penetration might have two different effects. Since cable offers more channels, higher cable penetration might lead to a lower Fox rating. However, if the Fox station is on a UHF channel, having cable might lead to a higher Fox share since the reception would be better.
- Ethnic composition of the population as measured by the 1990 Census. The shares of the population which is black (AFAM) and Hispanic (HISPAN) are included. Whites, American Indian, Eskimos, Aleuts, Asians, and Pacific Islanders are the omitted group.

The form of the regression equation is:

$$RATING = a + b_1 * UVV + b_2 * OTHU + b_3 * OTHV + b_4 * TVHH + b_5 * CAPEN + b_6 * AFAM + b_7 * HISPAN$$

The coefficients b_1 through b_6 measure the direction and magnitude of each explanatory factor on the Fox program's rating. Of interest here is whether the coefficient b_1 is negative and significant. If it is, we can say that a UHF signal depresses a program's rating, controlling for the program itself, day of the week, time slot, the number of competing channels, the market size, cable penetration, and viewers' tastes.

Table C.2 presents the regression results for the five days and two half hour time slots. The t-statistics show the level of significance of its corresponding coefficient. A t-statistic above two in this case indicates that the coefficient is significantly different from zero. The adjusted R^2 also is presented. It measures the share of the variation in the ratings which is explained by the factors we have included in the regression.

The presence of other broadcast channels has a mixed effect. More UHF stations tend to increase the ratings of the Fox station, while other VHF stations does not have a substantial affect on the Fox ratings. The size of the market, as measured by the number of television households, generally is insignificant.

Cable penetration has a negative effect on Fox's ratings. The share of the population that is Hispanic does not have a significant influence on Fox's rating in any time period. The share of the population that is black has a significant and positive effect in some time slots. Regional taste differences do not play a significant role in determining ratings and are omitted in the final version of the regressions.

Table C.2: Cross-Sectional Regression Tests Of UHF Ratings Handicap				
	Day and Time Slot			
	Monday First Half Hour		Monday Second Half Hour	
Explanatory Factor	Coefficient	t-statistic	Coefficient	t-statistic
Constant	11.0554	4.44	10.6269	4.06
UHF Signal	-1.3762	2.09	-1.0947	1.58
Number of Other UHF Channels	0.4574	2.60	0.4571	2.47
Number of Other VHF Channels	-0.2533	0.88	-0.1573	0.52
Number of Television Households	0.0001	0.23	0.0002	0.58
Cable Penetration	-0.0529	1.94	-0.0546	1.91
Share of Population which is Black	-0.0240	1.47	-0.0150	0.87
Share of Population Which is Hispanic	0.0074	0.31	0.0154	0.60
Adjusted R^2	0.1778		0.1648	

Table C.2: Cross-Sectional Regression Tests Of UHF Ratings Handicap				
	Day and Time Slot			
	Tuesday First Half Hour		Tuesday Second Half Hour	
Explanatory Factor	Coefficient	t-statistic	Coefficient	t-statistic
Constant	3.1852	1.70	3.2339	2.10
UHF Signal	-1.3227	2.23	-1.3432	3.29
Number of Other UHF Channels	0.5437	3.43	0.2930	2.69
Number of Other VHF Channels	0.3094	1.20	0.1746	0.98
Number of Television Households	0.0001	0.22	0.0001	0.73
Cable Penetration	-0.0275	1.12	-0.0204	1.21
Share of Population which is Black	0.1017	6.91	0.0503	4.97
Share of Population Which is Hispanic	0.0028	0.13	0.0173	1.15
Adjusted R^2	0.5119		0.4732	

Table C.2: Cross-Sectional Regression Tests Of UHF Ratings Handicap				
	Day and Time Slot			
	Wednesday First Half Hour		Wednesday Second Half Hour	
Explanatory Factor	Coefficient	t-statistic	Coefficient	t-statistic
Constant	15.8309	4.56	16.5120	4.51
UHF Signal	-3.8918	4.24	-4.0513	4.19
Number of Other UHF Channels	0.6036	2.46	0.7896	3.05
Number of Other VHF Channels	-0.2674	0.67	-0.2187	0.52
Number of Television Households	-0.0004	1.13	-0.0004	0.85
Cable Penetration	-0.0149	0.39	-0.0219	0.55
Share of Population which is Black	0.0014	0.06	0.00741	0.31
Share of Population Which is Hispanic	0.0198	0.59	0.0085	0.24
Adjusted R^2	0.2586		0.2726	

Table C.2: Cross-Sectional Regression Tests Of UHF Ratings Handicap				
	Day and Time Slot			
	Thursday First Half Hour		Thursday Second Half Hour	
Explanatory Factor	Coefficient	t-statistic	Coefficient	t-statistic
Constant	17.0241	4.11	10.5593	2.89
UHF Signal	-2.2072	2.02	-1.1974	1.24
Number of Other UHF Channels	1.0678	3.64	0.8622	3.33
Number of Other VHF Channels	-0.0566	0.12	0.0309	0.07
Number of Television Households	-0.0003	0.71	0.0005	1.25
Cable Penetration	-0.0713	1.57	-0.0668	1.67
Share of Population which is Black	0.0271	1.00	0.0937	3.90
Share of Population Which is Hispanic	-0.0175	0.43	0.0186	0.52
Adjusted R^2	0.1682		0.3693	

Table C.2: Cross-Sectional Regression Tests Of UHF Ratings Handicap				
	Day and Time Slot			
	Friday First Half Hour		Friday Second Half Hour	
Explanatory Factor	Coefficient	t-statistic	Coefficient	t-statistic
Constant	11.8209	4.77	12.6343	4.96
UHF Signal	-2.1504	3.28	-1.9866	2.95
Number of Other UHF Channels	0.3483	1.99	0.3888	2.16
Number of Other VHF Channels	-0.3732	1.31	-0.3845	1.31
Number of Television Households	-0.0003	1.16	-0.0003	1.09
Cable Penetration	-0.0668	2.47	-0.0773	2.77
Share of Population which is Black	0.0049	0.30	-0.0010	0.06
Share of Population Which is Hispanic	0.0228	0.94	0.0218	0.88
Adjusted R^2	0.2243		0.2189	

Exhibit B

Before The

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

In re

Review of the
Prime Time Access Rule,
Section 73.658(k)
of the Commission's Rules

MM Docket No. 94-123

COMMENTS
OF
THE ASSOCIATION OF INDEPENDENT TELEVISION STATIONS, INC.

EXHIBIT TWO

March 7, 1995

Methodology

INTV analyzed the "prime access" and "early fringe" programming and ratings for the 494 network affiliates and general audience independents in the top 100 markets.

For purposes of this study, "Prime access" is defined as the one-hour portion of prime time during which networks furnish no network programming to their affiliates in order to comply with the Prime Time Access Rule. In the Eastern and Pacific time zones, prime access is the one hour between 7:00 p.m. and 8:00 p.m. In the Central and Mountain time zones, prime access is the one hour between 6:00 p.m. and 7:00 p.m.

"Early fringe" time is the time period beginning at 5 p.m. and ending at the beginning of prime access. Early fringe begins at 5 p.m. local time in all time zones because independent stations and Fox affiliates typically schedule their afternoon blocks of children's programming from 3 p.m. to 5 p.m.

Programming and ratings information were derived from the Arbitron Television Market Reports for each market for November, 1992, and for November, 1993. Arbitron market rankings were used. A list of the markets in Appendix A reflects the markets as ranked by Arbitron.[6]

For each half-hour block of access time, the following information was compiled:

1. Time
2. Market
3. Arbitron Market Rank
4. Time Zone
5. Station Call Sign
6. Station Channel
7. Station Affiliation (ABC, CBS, Fox, Independent, NBC)
8. Program Title
9. Program Type
10. Program Rating

INTV also determined the most popular first run and off-network syndicated programming available to stations, based on Nielsen NSI rating and coverage data. Programming was "tiered." First tier "hits" included those syndicated programs which achieved a nationwide average rating of five (5) or higher and had been shown in at least 25 markets. Second tier programs included those which achieved a nationwide rating of three (3) or higher, but lower than five (5) and had been shown in at least 25 markets. All other syndicated programs were included in a third tier. The average nationwide ratings ranges for each tier reflected the ranges used by INTV in data submitted to the FCC and found persuasive in the FCC's proceeding concerning the network financial interest and syndication rules.[7] The 25 market requirement was designed to exclude syndicated programming of strong local or regional interest, but of little or no interest nationally. Local football coach's shows exemplify the type of programming excluded by the 25 market requirement.

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[6]INTV will also determine the results using the FCC top 50 market list.

[7]*See note 4, supra.*

"Off-network" programs were defined as programs which previously had appeared on one of the three established broadcast networks (*i.e.*, ABC, CBS, NBC). "Off-Fox" programs were defined as programs which previously had appeared on the Fox Network. "First-run" programs were defined as programs which previously had appeared on neither one of the three established broadcast networks (*i.e.*, ABC, CBS, NBC), nor the Fox Network.

Program Performance • 1993 • Access

Prog Type	Program	VHF Segments	VHF Rating Pts	UHF Segments	UHF Rating Pts	VHF Avg Rating	UHF Avg Rating	UHF vs VHF Avg Rating	Total Segments	Total Rtg Pts	Avg Rating	% Segments	% Rating Points
FR	21 Jump Street	0	0	2	0	0	0	•	2	0	0.0	0.2%	0.0%
FR	American Journal	16	120	2	8	7.5	4	-46.7%	18	128	7.1	1.8%	1.9%
FR	Best of Love Connection	0	0	1	0	0	0.0	•	1	0	0.0	0.1%	0.0%
FR	Best of Peoples Court	0	0	2	2	0	1.0	•	2	2	1.0	0.2%	0.0%
FR	Current Affair	34	300	15	101	8.8	6.7	-23.7%	49	401	8.2	5.0%	5.9%
FR	Emergency Call	0	0	1	0	0.0	0.0	•	1	0	0.0	0.1%	0.0%
FR	Entertainment Tonight	71	615	10	56	8.7	5.6	-35.3%	81	671	8.3	8.2%	9.9%
FR	Family Feud	4	30	7	32	7.5	4.6	-39.0%	11	62	5.6	1.1%	0.9%
FR	Hard Copy	23	200	6	43	8.7	7.2	-17.6%	29	243	8.4	2.9%	3.6%
FR	Inside Edition	36	330	3	16	9.2	5.3	-41.8%	39	346	8.9	4.0%	5.1%
FR	Jeopardy	50	773	13	165	15.5	12.7	-17.9%	63	938	14.9	6.4%	13.8%
FR	Love Connection	4	20	2	2	5.0	1.0	-80.0%	6	22	3.7	0.6%	0.3%
FR	Peoples Court	0	0	1	2	0.0	2.0	•	1	2	2.0	0.1%	0.0%
FR	Real Highway Patrol	1	7	17	60	7.0	3.5	-49.6%	18	67	3.7	1.8%	1.0%
FR	Star Trek: Next	6	28	28	176	4.7	6.3	34.7%	34	204	6.0	3.4%	3.0%
FR	Wheel of Fortune	80	1361	19	270	17.0	14.2	-16.5%	99	1631	16.5	10.0%	24.0%
FR	You Bet Your Life	0	0	1	9	0.0	9.0	•	1	9	9.0	0.1%	0.1%
FR	Subtotal	325	3784	130	942	11.6	7.2	-37.8%	455	4726	10.4	46.1%	69.5%

Program Performance • 1993 • Access

ON	227	0	0	1	5	0.0	5.0	•	1	5	5.0	0.1%	0.1%
ON	All in the Family	0	0	1	1	0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Amen	0	0	1	7	0	7.0	•	1	7	7.0	0.1%	0.1%
ON	Andy Griffith	0	0	5	17	0	3.4	•	5	17	3.4	0.5%	0.2%
ON	Beverly Hillbillies	1	0	2	5	0	2.5	∞	3	5	1.7	0.3%	0.1%
ON	Cheers	15	108	20	95	7.2	4.8	-34.0%	35	203	5.8	3.5%	2.4%
ON	Coach	4	20	27	110	5	4.1	-18.5%	31	130	4.2	3.1%	1.5%
ON	Cosby Show	3	27	9	58	9	6.4	-28.4%	12	85	7.1	1.2%	1.0%
ON	Dear John	0	0	1	1	0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Designing Women	1	7	6	28	7	4.7	-33.3%	7	35	5.0	0.7%	0.4%
ON	Different World	0	0	2	6	0	3.0	•	2	6	3.0	0.2%	0.1%
ON	Empty Nest	3	13	10	29	4.3	2.9	-33.1%	13	42	3.2	1.3%	0.5%
ON	Family Matters	4	25	11	41	6.25	3.7	-40.4%	15	66	4.4	1.5%	0.8%
ON	Full House	2	16	7	49	8	7.0	-12.5%	9	65	7.2	0.9%	0.8%
ON	Golden Girls	2	15	3	17	7.5	5.7	-24.4%	5	32	6.4	0.5%	0.4%
ON	Hill Street Blues	0	0	2	0	0	0.0	•	2	0	0.0	0.2%	0.0%
ON	Hogans Heros	0	0	3	2	0	0.7	•	3	2	0.7	0.3%	0.0%
ON	Little House	0	0	2	0	0	0.0	•	2	0	0.0	0.2%	0.0%
ON	Magnum PI	0	0	1	1	0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Mamas Family	1	8	1	2	8.0	2.0	-75.0%	2	10	5.0	0.2%	0.1%
ON	MASH	3	19	6	27	6.3	4.5	-28.9%	9	46	5.1	0.9%	0.5%
ON	Matlock	0	0	1	3	0.0	3.0	•	1	3	3.0	0.1%	0.0%
ON	Murphy Brown	3	21	6	26	7.0	4.3	-38.1%	9	47	5.2	0.9%	0.6%
ON	Petticoat Junction	0	0	1	0	0.0	0.0	•	1	0	0.0	0.1%	0.0%
ON	Rescue 911	6	37	10	29	6.2	2.9	-53.0%	16	66	4.1	1.6%	0.8%
ON	Roseanne	24	241	47	365	10.0	7.8	-22.7%	71	606	8.5	7.2%	7.1%
ON	Sanford and Son	0	0	1	2	0.0	2.0	•	1	2	2.0	0.1%	0.0%
ON	Saved by the Bell	0	0	1	1	0.0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Small Wonder	0	0	1	1	0.0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Who's the Boss	1	10	1	4	10.0	4.0	-60.0%	2	14	7.0	0.2%	0.2%
ON	WKRP in Cincinnati	0	0	1	1	0.0	1.0	•	1	1	1.0	0.1%	0.0%
ON	Wonder Years	0	0	7	9	0.0	1.3	•	7	9	1.3	0.7%	0.1%
ON	Subtotal	73	567	198	942	7.8	4.8	-38.7%	271	1509	5.6	27.5%	22.2%
All	TOTAL	428	4584	388	2215	10.7	5.7	-46.7%	816	6799	8.3	82.8%	80.1%

Program Performance • 1993 • Access

OF	Cops	16	133	27	145	8.3	5.4	-35.4%	43	278	6.5	4.4%	3.3%
OF	Married...With Children	14	100	33	186	7.1	5.6	-21.1%	47	286	6.1	4.8%	4.2%
OF	Subtotal	30	233	60	331	7.8	5.5	-29.0%	90	564	6.3	9.1%	6.6%

Exhibit C

The VHF Network Advantage

The VHF signal is technically superior to the UHF signal. This results in a decided ratings advantage for VHF stations. In 29 of the 33 markets where a network UHF affiliate competes against network VHF affiliates, the UHF station is the lowest rated.

Black=VHF
Red=UHF

Market	Market Rank	-------Feb'95 Share-------		
		ABC	NBC	CBS
Detroit	9	21	21	9
Atlanta	10	21	15	11
Cleveland	13	20	19	12
Tampa Bay	15	13	18	16
Hartford	26	16	14	19
San Diego	27	15	14	13
Charlotte	28	20	9	23
Milwaukee	29	19	21	9
Kansas City	31	19	11	20
Raleigh	32	24	9	25
W. Palm Beach	45	11	21	17
Louisville	50	22	19	20
Birmingham	51	31	18	10
Dayton	53	20	11	29
Jacksonville	55	11	18	28
Flint-Saginaw	60	25	17	18
Toledo	64	13	29	26
Springfield, MO	80	13	22	24
Jackson	90	15	25	25
Burlington	92	8	16	26
Tri-Cities, TN-VA	93	8	26	23
Savannah	102	11	13	31
Lansing	106	9	16	29
Montgomery	111	10	26	27
Augusta	108	23	12	27
Eugene	117	17	14	23
Columbus, GA	122	28	7	18
Terre Haute	144	8	16	31
Lubbock	152	17	27	26
Columbia-Jefferson City	149	16	24	31
Abilene	160	19	18	25
Hattiesburg	169	22	34	13
Rapid City	174	24	18	10

The VHF Independent Advantage

The VHF signal is technically superior to the UHF signal. This results in a decided ratings advantage for VHF stations. In all 19 markets where an independent UHF competes against an independent VHF, the UHF station is the lower rated.

New York (1)	Share
WNYW - 5 (Fox)	10
WPIX - 11	10
WWOR - 9	9
WNJU - 47	1

Los Angeles (2)	
KTTV - 11 (Fox)	10
KTLA - 5	9
KCOP - 13	8
KCAL - 9	6
KMEX - 34	4
KVEA - 52	1

Chicago (3)	
WGN - 9	12
WPWR - 50	8
WFLD - 32 (Fox)	6
WGBO - 66	3
WCIU - 26	1
WCFC - 38	1

San Francisco (5)	
KTVU - 2 (Fox)	12
KBHK - 44	6
KOFY - 20	5
KICU - 36	2
KTSF - 26	1

Washington, D.C. (7)	
WTTG - 5 (Fox)	14
WDCA - 20	6
WFTY - 50	1

Dallas (8)	Share
KTVT - 11	8
KDAF - 33 (Fox)	7
KTXA - 21	5
KXTX - 39	3
KDFI - 27	3

Seattle (13)	
KCPQ - 13 (Fox)	9
KSTW - 11	7
KVOS - 12	1
KTZZ - 22	1
KTBW - 20	1

Minneapolis (14)	
KMSP - 9	12
KITN - 29 (Fox)	6
KLGT - 23	2

Miami (16)	
WSVN - 7 (Fox)	12
WDZL - 39	7
WBFS - 33	6
WLTV - 23	6
WSCV - 51	4

St. Louis (18)	
KPLR - 11	11
KDNL - 30 (Fox)	9
KNLC - 24	1

Phoenix (20)	
KPHO - 5	7
KNXV - 15 (Fox)	8
KUTP - 45	5

San Diego (24)	Share
XETV - 6 (Fox)	9
KUSI - 51	6
KTTY - 69	3

Indianapolis (26)	
WTTV 4	10
WXIN - 59 (Fox)	9
WMCC - 23	3
WHMB - 40	1

Portland (27)	
KPTV - 12	12
KPDX - 49 (Fox)	7

Salt Lake City (38)	
KSTU - 13 (Fox)	12
KJZZ - 14	4

Albuquerque (50)	
KASA - 2 (Fox)	7
KLUZ - 41	1

Honolulu (70)	
KHNL - 13 (Fox)	9
KFVE - 5	4
KIKU - 20	1

Las Vegas (75)	
KVVU - 5 (Fox)	14
KRLR - 21	4
KFBT - 33	2

Tucson (81)	
KMSB - 11 (Fox)	7
KTTU - 18	3

Exhibit D

Before the
Federal Communications Commission
Washington, D.C.

In re   )
)
Review of the Prime Time   )   MM Docket No. 94-123
Access Rule, Section 73.658(k) of the   )
Commission's Rules   )

Economic Report

The Economic Effects of Repealing the Prime Time Access Rule: Impact on Broadcasting Markets and the Syndicated Program Market

Prepared for :
Association of Independent Television Stations, Inc.
King World Productions, Inc.
Viacom Inc.

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March 7, 1995

The growth of cable in the 1980's has not reduced the profitability gap between VHF and UHF affiliates, implying a UHF disadvantage remains.
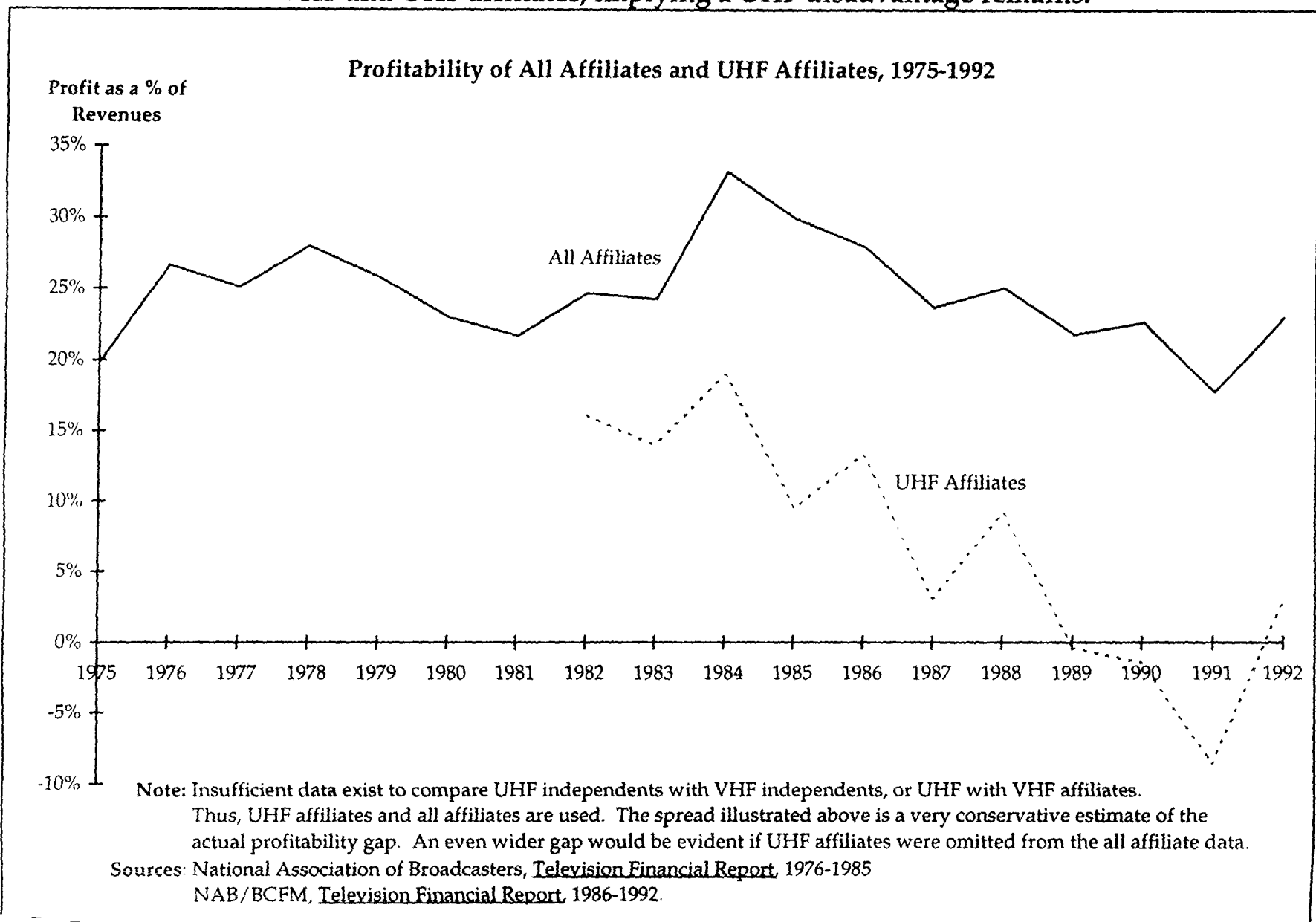
Profitability of All Affiliates and UHF Affiliates, 1975-1992

Note: Insufficient data exist to compare UHF independents with VHF independents, or UHF with VHF affiliates. Thus, UHF affiliates and all affiliates are used. The spread illustrated above is a very conservative estimate of the actual profitability gap. An even wider gap would be evident if UHF affiliates were omitted from the all affiliate data.

Sources: National Association of Broadcasters, Television Financial Report, 1976-1985
NAB/BCFM, Television Financial Report, 1986-1992.

Figure III.4

C.   THE ECONOMIC GAP BETWEEN VHF AND UHF AFFILIATES REMAINED CONSTANT DURING THE PERIOD OF RAPID CABLE GROWTH, SUGGESTING CABLE HAS NOT CLOSED ANY PURELY UHF VS. VHF GAP.

The practical issues explored above in UHF vs. VHF time series comparisons are really the local economic dominance of network affiliates (which are mainly VHF stations) compared to the marginal status of independent television stations (which are mainly UHF stations).

Such comparisons do not afford a *pure* test of the Commission's concern with whether (partial) elimination of signal carriage disadvantages of UHF stations due to the growth of cable has narrowed the UHF vs. VHF gap. The tests in **Figures III.1, III.2** and **III.3** above do not discriminate between signal carriage disadvantages as such and all other economic disadvantages which would affect rate of return differentials between affiliates and independents.

For years since 1981, the NAB database does enable us to control for affiliate vs. independent economic status. Ideally, two tests should be employed: (1) comparing rate of return trends for UHF vs. VHF independents; and (2) comparing rate-of-return trends for UHF vs. VHF affiliates. The NAB data, understandably, do not break out data for the relatively few VHF independents which exist. However, starting in 1982, NAB's <u>Television Financial Report</u> has presented annual data for UHF affiliates.

A comparison of rate of return data for UHF affiliates and all affiliates affords a conservative and useful test of whether cable growth during the 1980s has reduced the signal carriage disadvantage faced by UHF stations. In **Figure III.4**, such a test demonstrates clearly that over the past decade, the economic gap attributable to UHF vs. VHF status has not diminished.

Any economic advantage associated with being part of a national network is controlled for since the comparison in **Figure III.4** is only for affiliates. Similarly, any dominance affiliates possess in their local markets vis-a-vis independents is controlled for. No independent television stations are included

in the UHF statistics, so the marked decline in rate of return on sales between 1982 and 1992 cannot be due to attributes of **independent** stations that might render them weak, notably their non-network status, weaker local financial base, lower audience shares, less attractive programming format, etc.

Overall, the growing prevalence of cable is associated with no decrease in the economic gap UHF stations face vis-a-vis VHF stations. One reason for this fact is that while UHF signal quality is improved by cable carriage, this is more than offset by the additional cable channels that are added when a home changes from a broadcast delivery system to a cable delivery system. Also, UHF stations have suffered historically from disadvantageous channel positioning on cable systems not to mention complete lack of carriage in many instances. Moreover, each cable channel reduces at the margin the shares and ratings of independent and affiliate broadcast stations, but is more competitive vis-a-vis independents than affiliates.

In **Table III.1**, we summarize more formal statistical tests based on the profitability data for **Figures III.1, III.3,** and **III.4**.[25] The statistical methods test (1) whether the profitability of affiliates nationwide or in the top 10 markets has been essentially constant over time; and (2) whether the profitability spread between affiliates and independents or between all affiliates and UHF affiliates has closed over time. The statistical results confirm what is shown in the corresponding Figures. Profitability for the affiliates has not changed significantly over time, showing small variations from its mean value. In contrast, the economic gap between UHF independents and affiliates, both nationwide and in the top 10 markets has grown over time. The profitability gap between VHF affiliates and UHF affiliates seems to have remained essentially constant.

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[25] The formal statistical method used here tests whether the values of profitability or the profitability spread vary significantly from their average values over the time period. The test statistic is a chi square, the sum of the squared deviations of the value from its mean divided by the mean. Large values of the chi square indicate that the deviations are significant, i.e., the values are significantly different from their mean.